

# In Accordance With Federal Uniform Test Method for Certain Lubricated Air Compressors

**Rotary Compressor: Variable Frequency Drive** 

	MODEL DATA - FO	OR COMPRESSED	AIR	
1	Manufacturer: <b>ELGi</b>			
	Model Number: EG 45PM-100 V		Date:	01/25/2024
2	X Air-cooled Water-cooled		Type:	SCREW
		;	# of Stages:	1
3*	Full Load Operating Pressure <sup>b</sup>	100	psig	
4	Drive Motor Nominal Rating	60		hp
5	Drive Motor Nominal Efficiency	97.6		percent
6	Fan Motor Nominal Rating (if applicable)	2.08 (1.55) / 1 FA	N	hp
7	Fan Motor Nominal Efficiency	NA		percent
	Input Power (kW)	Capacity (acfm) <sup>a,d</sup>		Specific Power
			(	kW/100 acfm) <sup>d</sup>
	55.5 46.7	309.0 257.0	17.97 17.78	
8*	38.1	216.0	17.78	
	30.9	179.0	18.19	
	23.2	124.0	18.79	
	12.9	54.0	21.52	
9*	Total Package Input Power at Zero Flow c, d	0.00	kW	
10	Isentropic Efficiency	73.89		%
11	Note: Graph is only a Note: Y-Axis Scale, 10 to 3:	150 225 Capacity(CFM) visual representation of the data in 8, + 5kW/100acfm increments if necess	300 Section 8 sary above 35	

\*For models that are tested in the CAGI Performance Verification Program, these items are verified by the third party administrator bisite for a list of participants in the third party verification program: <a href="www.cagi.org">www.cagi.org</a>



- a. Measured at the discharge terminal point of the compressor package in accordance with ISO 1217, Annex E;
   ACFM is actual cubic feet per minute at inlet conditions.
- b. The operating pressure at which the Capacity (Item 8) and Electrical Consumption (Item 8) were measured for this data sheet.
- c. No Load Power. In accordance with ISO 1217, Annex E, if measurement of no load power equals less than 1%,
- manufacturer may state "not significant" or "0" on the test report. d. Tolerance is specified in ISO 1217, Annex E, as shown in table below:
  - NOTE: The terms "power" and "energy" are synonymous for purposes of this document.

Member

Volume Flow Rate at specified conditions		Volume Flow Rate	Specific Energy  Consumption	No Load / Zero Flow Power
m <sup>3</sup> / min	ft <sup>3</sup> / min	%	%	%
Below 0.5	Below 17.6	+/- 7	+/- 8	
0.5 to 1.5	17.6 to 53	+/- 6	+/- 7	1/ 100/
1.5 to 15	53 to 529.7	+/- 5	+/- 6	+/- 10%
Above 15	Above 529.7	+/- 4	+/- 5	

ROT 031.1



# In Accordance With Federal Uniform Test Method for Certain Lubricated Air Compressors

**Rotary Compressor: Variable Frequency Drive** 

1	Manufacturer: <b>ELGi</b>			
	Model Number: EG 45PM-115 V		Date:	01/25/2024
2	X Air-cooled Water-cooled		Type:	SCREW
		#	of Stages:	1
3*	Full Load Operating Pressure	115		psig <sup>b</sup>
4	Drive Motor Nominal Rating	60		hp
5	Drive Motor Nominal Efficiency	97.6		percent
6	Fan Motor Nominal Rating (if applicable)	2.08 (1.55) / 1 FA	N	hp
7	Fan Motor Nominal Efficiency	NA		percent
	Input Power (kW)	Capacity (acfm) <sup>a,d</sup>		Specific Power
		1	(	kW/100 acfm) <sup>d</sup>
	52.1 44.3	287.0 239.0		18.14
8*	36.6	239.0	18.18 18.22	
	30.0	167.0	19.16	
	23.1	114.0	20.10	
	14.2	53.0	23.68	
9*	Total Package Input Power at Zero Flow c, d	0.00	kW	
10	Isentropic Efficiency	76.73		%
11		150 225 Capacity(CFM)	300 section 8	

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- a. Measured at the discharge terminal point of the compressor package in accordance with ISO 1217, Annex E;
   ACFM is actual cubic feet per minute at inlet conditions.
- b. The operating pressure at which the Capacity (Item 8) and Electrical Consumption (Item 8) were measured for this data sheet.
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Member

Volume Flow Rate at specified conditions		Volume Flow Rate	Specific Energy  Consumption	No Load / Zero Flow Power
m <sup>3</sup> / min	ft <sup>3</sup> / min	%	%	%
Below 0.5	Below 17.6	+/- 7	+/- 8	
0.5 to 1.5	17.6 to 53	+/- 6	+/- 7	1/ 100/
1.5 to 15	53 to 529.7	+/- 5	+/- 6	+/- 10%
Above 15	Above 529.7	+/- 4	+/- 5	

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**Rotary Compressor: Variable Frequency Drive** 

		OR COMPRESSED	AIK	
1	Manufacturer: <b>ELGi</b>			
	Model Number: EG 45PM-125 V		Date:	01/25/2024
2	X Air-cooled Water-cooled		Type:	SCREW
		#	of Stages:	1
3*	Full Load Operating Pressure <sup>b</sup>	125		psig <sup>b</sup>
4	Drive Motor Nominal Rating	60		hp
5	Drive Motor Nominal Efficiency	97.6		percent
6	Fan Motor Nominal Rating (if applicable)	2.08 (1.55) / 1 FA	N	hp
7	Fan Motor Nominal Efficiency	NA		percent
	Input Power (kW)	Capacity (acfm) <sup>a,d</sup>		Specific Power
			(kW/100 acfm) <sup>d</sup>	
	53.1 45.4	270.0 189.0	19.68 19.74	
8*	37.6	130.0		
	29.2	108.0	19.81 19.54	
	29.2	74.0	19.28	
	14.5	50.0	24.22	
9*	Total Package Input Power at Zero Flow c, d	0.00	kW	
10	Isentropic Efficiency	64.25		%
11	Note: Graph is only a	150 225 Capacity(CFM) visual representation of the data in S 5, + 5kW/100acfm increments if necess	300 ection 8	

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- a. Measured at the discharge terminal point of the compressor package in accordance with ISO 1217, Annex E;
   ACFM is actual cubic feet per minute at inlet conditions.
- b. The operating pressure at which the Capacity (Item 8) and Electrical Consumption (Item 8) were measured for this data sheet.
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Volume Flow Rate at specified conditions		Volume Flow Rate	Specific Energy  Consumption	No Load / Zero Flow Power
m <sup>3</sup> / min	ft <sup>3</sup> / min	%	%	%
Below 0.5	Below 17.6	+/- 7	+/- 8	
0.5 to 1.5	17.6 to 53	+/- 6	+/- 7	+/- 10%
1.5 to 15	53 to 529.7	+/- 5	+/- 6	±/- 10%
Above 15	Above 529.7	+/- 4	+/- 5	

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Rotary Compressor: Variable Frequency Drive

MODEL DATA - FO	OR COMPRESSED	AIR	
Manufacturer: <b>ELGi</b>			
Model Number: EG 45PM-150 V		Date:	01/25/2024
X Air-cooled Water-cooled		Type:	SCREW
	:	# of Stages:	1
Full Load Operating Pressure	150		psig
Drive Motor Nominal Rating	60		hp
Drive Motor Nominal Efficiency	97.6		percent
Fan Motor Nominal Rating (if applicable)		N	hp
Fan Motor Nominal Efficiency	NA		percent
Input Power (kW)	Canacity (acfm) <sup>a,d</sup>		Specific Power
	Capacity (acim)	(	kW/100 acfm) <sup>d</sup>
		22.14	
			21.84
			21.54
			22.78
		24.03	
	52.0		28.41
Total Package Input Power at Zero Flow c, d	0.00		kW
Isentropic Efficiency	74.12		%
Note: Graph is only a v Note: Y-Axis Scale, 10 to 35.	isual representation of the data in \$5, + 5kW/100acfm increments if necess	3000 Section 8 sary above 35	
	Manufacturer: ELGi  Model Number: EG 45PM-150 V  X Air-cooled Water-cooled  Full Load Operating Pressure  Drive Motor Nominal Rating  Drive Motor Nominal Efficiency  Fan Motor Nominal Efficiency  Input Power (kW)  55.8  46.8  38.0  31.6  24.2  17.0  Total Package Input Power at Zero Flow c, d  Isentropic Efficiency  Note: Graph is only a v Note: Y-Axis Scale, 10 to 35	Manufacturer: ELGi  Model Number: EG 45PM-150 V  X Air-cooled Water-cooled  Full Load Operating Pressure 6  Drive Motor Nominal Rating 60  Drive Motor Nominal Efficiency 97.6  Fan Motor Nominal Efficiency NA  Input Power (kW) Capacity (acfim) 4.6  55.8 252.0  46.8 219.0  38.0 176.0  31.6 153.0  24.2 100.0  17.0 52.0  Total Package Input Power at Zero Flow c, d  Isentropic Efficiency 74.12	Model Number: EG 45PM-150 V  X Air-cooled Water-cooled Type:  # of Stages:  Full Load Operating Pressure b  Drive Motor Nominal Rating 60  Drive Motor Nominal Efficiency 97.6  Fan Motor Nominal Efficiency NA  Input Power (kW) Capacity (acfim) a,d  55.8 252.0  46.8 219.0  38.0 176.0  31.6 153.0  24.2 100.0  17.0 52.0  Total Package Input Power at Zero Flow c, d  Isentropic Efficiency 74.12

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Below 0.5	Below 17.6	+/- 7	+/- 8	
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1.5 to 15	53 to 529.7	+/- 5	+/- 6	+/- 10%
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**Rotary Compressor: Variable Frequency Drive** 

	MODEL DATA - F	OR COMPRESSED	AIR	
1 Manufac	turer: <b>ELGi</b>			
Model N	umber: EG 45PM-175 V		Date:	01/25/2024
2 <b>X</b>	Air-cooled Water-cooled		Type:	SCREW
			# of Stages:	1
3* Full Load	d Operating Pressure <sup>b</sup>	175		psig <sup>b</sup>
4 Drive Mo	otor Nominal Rating	60		hp
5 Drive Mo	otor Nominal Efficiency	97.6		percent
6 Fan Moto	or Nominal Rating (if applicable)	2.08 (1.55) / 1 FA	N	hp
7 Fan Moto	or Nominal Efficiency	NA		percent
	Input Power (kW)	Capacity (acfm) <sup>a,d</sup>		Specific Power
			(	kW/100 acfm) <sup>d</sup>
	52.6	215.0		24.45
8*	44.0	187.0		24.10
	35.7	150.0		23.74
	30.3	130.0		25.61
	23.6	87.0		27.49
	19.0	51.0		31.75
9* Total Pag	ckage Input Power at Zero Flow c, d	0.00		kW
10 Isentropi	c Efficiency	72.29		%
11	40	150 Capacity(CFM)	225	

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0.5 to 1.5	17.6 to 53	+/- 6	+/- 7	1/ 100/
1.5 to 15	53 to 529.7	+/- 5	+/- 6	+/- 10%
Above 15	Above 529.7	+/- 4	+/- 5	

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